EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Robert Shaddox and Mr. Tom Thrash on 08/04/2008.

The application has been amended as follows:

i. In claim 10 line 1, please replace "claim 1-8 or 9" with - -any one of claims 1-6- -.

ii. In claim 11 line 1, please replace "1-9 or 10" with - -1- -.

iii. In claim 14 line 1, please replace "1-12 or 13" with - -any one of claims 1-6 or 11-13- -.

iv. In claim 21 line 1, please replace "any one of claims 19 or 20" with - -claim 19- -.

v. In claim 22 line 1, please replace "any one of claims 19 or 20" with - -claim 19- -.

vi. In claim 23 line 1, please replace "any one of claims 19 or 20" with - -claim 19- -.

vii. In claim 25 line 1, please replace "20-23 or 24" with - -20- -.

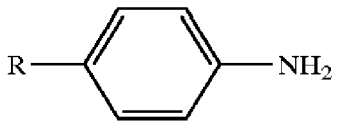
viii. Please add the following new claims:

a. - -45. The method of claim 20, wherein the aniline derivative is selected from the group consisting of ortho-substituted anilines, meta-substituted anilines, para-substituted anilines, and combinations thereof. - -

b. - -46. The method claim 20, wherein the aniline derivative is selected from the group consisting of di-substituted anilines, tri-substituted anilines,

tetra-substituted anilines, penta-substituted anilines, and combinations thereof. - -

c. - -47. The method of claim 20, wherein the aniline derivative comprises:



and wherein R is selected from the group consisting of halogen, nitro, cyano, alkyl, aryl, arylalkyl, hydroxy, carboxylic ester, carboxylic acid, thiocarbonate, amide, alkoxy, polyether, polyalkyl, hydroxyalkyl, and combinations thereof- -

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

i. Bahr et al. (Functionalization of Carbon Nanotubes by Electrochemical Reduction of Aryl Diazonium Salts: A Bucky Paper Electrode) disclose the functionalization of carbon nanotubes with an aryl diazonium salt (p. 6536 col. 2) by reacting the nanotubes at the sidewall carbon atoms with the salt (p. 6536 col. 1, p. 6541 col. 1). Single-wall carbon nanotubes with a diameter of 0.7 nm are used (p. 6537 col. 1). The carbon nanotubes are reacted with the organic functionalizing agent by mixing (p. 6537 col. 2). Bahr et al. differs from the instant invention in that the carbon nanotubes are mixed with the aryl diazonium salt, which is in an acetonitrile solution. In other words, the reaction does not occur in the absence of a solvent.

ii. Haddon et al. (U.S. Patent No. 6,187,823 B1) disclose a method for functionalizing single-walled carbon nanotubes (col. 1 lines 63-67) with an organic functionalizing agent such as 4-pentylaniline, 4-tetradecylaniline, or 4-pentacosylaniline in the absence of a solvent (col. 2 lines 20-36). The diameter of the nanotubes is 0.5-100 nm, which falls within the instantly claimed range of 0.7-2.0 m of claim 6 (col. 2 lines 45-49). Haddon et al. does not disclose the sidewall functionalization of said nanotubes.

iii. Tanaka et al. (Mechanochemical Arylation and Alkylation of Fullerene C_{60} Under the Solvent Free Conditions) disclose the functionalization of fullerenes with an organic functionalizing agent in the absence of a solvent (p. 4397). Aryl or alkyl bromide may be employed as aryl or alkyl radical functionalizing agents (p. 4398 line 3). The step of reacting comprises mixing the fullerenes with the organic functionalizing agent in mechanical operations such as ball milling and shaking (p. 4398 lines 4-6). Tanaka et al. does not disclose the use of carbon nanotubes, which may or may not be a fullerene, or the sidewall functionalization of said fullerenes.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

Claims 1-6, 10-25 and 45-47 have been allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SERENA L. HANOR whose telephone number is (571)270-3593. The examiner can normally be reached on Monday - Thursday 8:00 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (571) 272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SLH

/Timothy C Vanoy/

Primary Examiner, Art Unit 1793